FEB 1 9 2002

## 510(k) SUMMARY
as required per 807.92(c)

Submitters Name, Address:

Siemens Medical Systems, Inc.
Electromedical Systems Group, PCS
Danvers, MA 01923
Tel: (978) 907-7500
Fax: (978) 750-6879
Official Correspondent: Connie Hertel, Director, QA/RA
Contact person for this submission: Penelope H. Greco
Date submission was prepared: January 24, 2002

Trade Name, Common Name and Classification Name:

A. Trade Name:

Siemens Medical Information Bus (MIB, MIB II, MIB Duo) Protocol Converter

B. Common Name, Classification Name, Class and Regulation Number:

| Common Name | Classification Number | Class | Regulation Number |
|---|---|---|---|
| Transducer Signal amplifier and conditioner | 73 DRQ | II | 21 CFR 870.2060 |

Legally Marketed Device Identification:

Siemens INFINITY MIB II Duo: 510(k) K012461
Siemens INFINITY MIB II Protocol Converter: 510(k) K010640
Siemens Medical Information Bus (MIB) Protocol Converter:
510(k) K970368, K973222, K991661, K003248
Siemens MVWS and INFINITY Network with INFINITY VentViewer (K003246)

Description of Modification:

The Medical Information Bus (MIB) Protocol Converters have received six 510(k) clearances for connectivity with third party devices.

1. 510(k) K970368 was cleared for interface with Siemens SV300 ventilator and the Baxter Vigilance blood gas/continuous cardiac output monitor.

2. 510(k) K973222 was cleared for interface with Puritan Bennett 7200 ventilator, the Draeger Evita II, Draeger Evita IV, and Draeger Babylog ventilators, and Siemens SV900 ventilator.

3. 510(k) K991661 was cleared for interface with
   Anesthesia Systems
   Dräger Narkomed II Dräger Narkomed IV Dräger Julian Ohmeda 7900
   Point of Care Blood Gas Analyzers
   Abbott Oximetrix 3
   AVL Medical Instruments
   Opti Critical Care Analyzer, Portable Blood Gas Analyzer
   Optical Sensors Inc.
   OSI – Optical CAM
   VIA Medical
   VIA V-ABG1 Blood Gas Chemistry Monitor

4. 510K) K003248 was cleared for interface with the Aspect BIS monitor

5. 510(k) K010640 introduced Siemens INFINITY MIB II Protocol Converter

6. 510(k) K012461 introduced Siemens INFINITY MIB II Duo Protocol Converter

Minor software modifications have been implemented in the MIB/MIB II and MIB Duo protocol converters, and a device specific accessory cable is now available that allows an interface connection for Siemens Servo*i* Ventilator (K010925) to the INFINITY modular monitors (SC 9000/SC7000/SC9000XL/SC8000). This connection enables the display of Servo*i* Ventilator data on an INFINITY modular monitor and on the VentCentral display (K003246) of the MultiView WorkStation.

Intended Use:
The Siemens Medical Information Bus (MIB/MIB II and MIB Duo) Protocol Converters are intended for use in an environment where patient care is provided by healthcare professionals (Physician, Nurse, Technician) when the professional determines that a third party medical device that provides data, such as: Siemens SV 300 ventilator, Siemens Servo*i* Ventilator, Baxter Vigilance blood gas/continuous cardiac output monitor, Siemens SV900 ventilator, Draeger Evita II ventilator, Draeger Evita IV ventilator, Draeger Babylog ventilator, Puritan Bennett 7200 ventilator, Draeger Narkomed II Anesthesia System, Draeger Narkomed IV Anesthesia System, Draeger Julian Anesthesia Machine, Ohmeda 7900 Anesthesia Machine, Abbott Oximetrix 3 Blood Gas Analyzer, AVL Medical Instruments: Opti Critical Care Analyzer Portable Blood Gas Analyzer, Optical Sensors Inc.: OSI – Optical CAM, VIA Medical: VIA V-ABG1 Blood Gas Chemistry Monitor; Aspect A-2000 BIS Monitor should be connected to a Siemens INFINITY Modular Monitor for display.





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**Special 510(k): Device Modification**
**SIEMENS Medical Information Bus (MIB) Protocol Converters**

Assessment of non-clinical performance data for equivalence: Section K

Assessment of clinical performance data for equivalence: Not applicable

Biocompatability: Not applicable

Sterilization: Not applicable

Standards and Guidances: 1073.3.1 Medical Device Communications-
Transport Profile-Connection Mode
1073.3.2 – 2000 IEEE Standard for Medical Communications
Transport Profile – IrDA Based – Cable Connected



**COMPANY CONFIDENTIAL**

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

FEB 1 9 2002

Ms. Penelope H. Greco
Regulatory Submissions Manager
Siemens Medical Systems, Inc.
Electromedical Systems Group, PCS
16 Electronics Avenue
Danvers, MA 01923

Re: K020277
Trade/Device Name: Siemens Medical Information Bus (MIB II) Protocol Converter
Regulation Number: 21 CFR 870.2060
Regulation Name: Transducer Signal Amplifier and Conditioner
Regulatory Class: II (two)
Product Code: DRQ
Dated: January 24, 2002
Received: January 28, 2002

Dear Ms. Greco:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

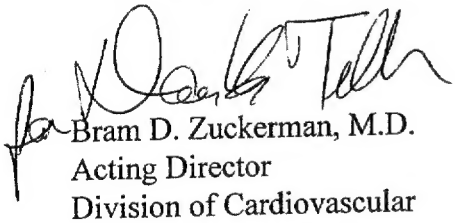
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4646. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,



Bram D. Zuckerman, M.D.
Acting Director
Division of Cardiovascular
and Respiratory Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

510(k) Number (if known): K020277

Device Name: Siemens Medical Information Bus (MIB) Protocol Converters

Indications for Use:

The Medical Information Bus (MIB) Protocol Converters (MIB, II & MIB Duo) are indicated for use in an environment where patient care is provided by healthcare professionals (Physician, Nurse, Technician) when the professional determines that third party medical devices that provide data, such as:

Siemens SV 300 ventilator
Siemens Servo*i* ventilator
Baxter Vigilance blood gas/continuous cardiac output monitor
Siemens SV900 ventilator
Draeger Evita II ventilator
Draeger Evita IV ventilator
Draeger Babylog ventilator
Puritan Bennett 7200 ventilator
Draeger Narkomed II Anesthesia System
Draeger Narkomed IV Anesthesia System
Draeger Julian Anesthesia Machine
Ohmeda 7900 Anesthesia Machine
Abbott Oximetrix 3 Blood Gas Analyzer
AVL Medical Instruments: Opti Critical Care Analyzer, Portable Blood Gas Analyzer
Optical Sensors Inc.: OSI – Optical CAM
VIA Medical: VIA V-ABG1 Blood Gas Chemistry Monitor
Aspect A-2000 BIS Monitor

should be connected to a Siemens INFINITY Modular Bedside Monitor (SC 9000 / SC 7000 / SC 8000 / SC 9000XL) for display.

Note: *The SC 9000 does not support communication with the Aspect BIS Monitor

**MRI Compatibility Statement:**
The MIB, MIB II and MIB DUO Protocol Converters are not compatible for use in a MRI magnetic field.

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓ OR Over-The-Counter Use____
(Per 21 CFR 801.109)

Division of Cardiovascular & Respiratory Devices
510(k) Number K020277